

TIIAP FY 1999
Project Narrative

Philadelphia Enterprise Center

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Community Networking
Philadelphia, Pennsylvania

1. Project Definition

West Philadelphia, incorporated into the city of Philadelphia in 1854, is populated by 220,000 people, 18% of whom live below the poverty line. Unemployment rests at about twice the national rate of 4.2%. Physical deterioration, racial segregation, abandonment, crime and low academic achievement belie the nation's booming economy. Enterprise development in Philadelphia as a whole lags behind the nation, with the metro area ranking 44 out of 50 across the nation as a place to start and grow a business (Cognetics, Inc. 1997).

Prospects are even bleaker for the city's African-Americans. Over half of Philadelphia's black children live in poverty, and 75% come from single-parent families. African-Americans have traditionally fallen behind other minorities in new venture initiation. Philadelphia supports comparatively few black-owned firms.

Often West Philadelphians have no choice but to work multiple low-paying jobs to make ends meet, thus making entrepreneurship a difficult and elusive goal. Personal problems, lack of capital and time, insufficient access to technology, and inability to harness the technological resources of the information economy are key obstacles to the development of start-up firms in West Philadelphia.

While West Philadelphia is home to a large needy population, it supports significant and powerful resources and a host of strong partners willing to effect positive change. Technology development, led by the country's largest and most innovative cluster of medical and educational institutions, has a strong and growing base in West Philadelphia. Patent development, lab-to-marketplace technology-transfer, and bio-tech research are booming in this community. Successful partnerships among local organizations like the West Philadelphia Enterprise Center (WPEC), the Ben Franklin Technology Center, and the University of Pennsylvania, have resulted in a recent burst of enterprise development in West Philadelphia's African American community. These organizations now seek to take this effort to a new level in order to enable this community to access, utilize, and prosper from information technology and the Internet.

WPEC, the 1999 National Business Incubator Association Incubator of the Year, will create the **West Philadelphia Interactive Business Network (IBN)** -- a community of partnerships, mentorships, collaborators, teachers, and technology vendors. This community will be represented as an Internet portal created by IBN's project team.

Access points (public and private) will be identified and/or created and then publicized. Outreach programs, geared toward recruiting entrepreneurs, will educate community members about the uses and benefits of PCs and Internet technology -- especially as they affect business goals. The IBN Internet Portal will become the data delivery platform for the dissemination of interactive, on-line training and mentoring programs. Mentors will work with participants, forging new relationships with related businesses to leverage the power of the technology and the Internet for collaborative purposes.

IBN is a key component in a large-scale effort to transform a community in general decline into an entrepreneurial and wealth-generating hub of economic growth. IBN will strengthen current efforts and partnerships by carefully bringing technology to a community ready to leverage it. By doing so, organizers of IBN believe that the project will achieve a ***significant and measurable positive impact on the local economy.***

The core initiative of IBN will build upon the success of the programs created at the West Philadelphia Enterprise Center, including YES (Youth + Entrepreneurship = Success), Strive to THRIVE, a pre-incubation workshop for would-be entrepreneurs, and THRIVE, the award-winning, inner-city, six-year, business development program. Each program is designed to feed one another – supporting a continuous effort to find, encourage and transform emerging entrepreneurial ventures into successful, thriving, community-based businesses.

1. **YouthNET**, seeks to introduce youth to technology tools necessary for success in business and entrepreneurship. Young people are able to grasp and follow technological advances more nimbly than adults, and yet inner city youth are often unable to access technology resources because of under-funded school districts, impoverished homes, and lack of role models in technology fields. Initiatives include technology demonstrations at YES camps, technology curriculum through YES school-based initiatives, and technology access for YES participants at WPEC.
2. **StriveNET**, seeks to train current and potential entrepreneurs on how to utilize technology to grow and improve their business. Interactive workshops will be conducted over the internet at the Philadelphia Housing Authority's West Park Apartments, the computer lab located at WPEC and other area locations. In addition, clients may interact with these same workshops from a personal computer within their home/office. The ideal program participants include those who are developing a business idea while they maintain their day job and/or those who will run their start-up business out of their home or another location outside of the current incubator walls.
3. **ThriveNET**, will select five businesses currently located at WPEC. These particular businesses will be selected based upon the assumption that access to appropriate technology will propel rapid growth. These firms will learn to use technology more effectively in order to increase their customer base, improve customer service and develop new channels of product delivery. IBN programs will introduce automated sales and marketing processes and electronic commerce programs.

IBN will leverage technology through web-based training and access to experts to provide business, marketing, and technology planning not normally available to new, small businesses. The program will provide a set of collaborative technologies (web-based information and online conferencing, email-based discussion, video conferencing) to allow participants to communicate with each other and with experts.

Our goal is to have a positive, measurable impact on the economy of West Philadelphia through a program that can both be scaled and replicated. We will measure the specific

economic benefits, in terms of revenue generation, employment, and skills development, that this program will bring.

ThriveNET will significantly increase the revenue growth of five existing businesses currently in the WPEC incubator. **StriveNET's** outreach programs will involve 500+ potential entrepreneurs. General education and exposure to the various programs will benefit most of them. We expect more in-depth contact (interviews) with 100+ potential entrepreneurs during the recruitment process. As a result of recruitment, we expect to develop 30 new firms during the course of the grant. **YouthNET** will involve 2,500 youth in technology-based entrepreneurship training and will ultimately create a youth-run, web-site development company.

2. Evaluation

IBN will determine the effectiveness of ThriveNet on an absolute basis by comparing sales and revenue before and after participation in the program. Progress in all facets of business operation will be monitored throughout the program in accordance with current evaluation techniques used by WPEC.

StriveNET will be evaluated on its ability to recruit potential entrepreneurs and train them effectively to begin the business development process. How many firms can StriveNET develop? What are their long-term prospects for success according to WPEC's evaluation criteria?

The effectiveness of YouthNET will be determined by a general assessment of participants' knowledge and understanding of technology in an entrepreneurial setting. YouthNET will be judged by its ability to successfully develop a youth-run web-site development firm as well as the effectiveness of the program in enhancing the chain of entrepreneurial development. (See Appendix). How many youth participants go on to participate in Strive to Thrive, Thrive, ultimately owning successful firms.

Evaluators will utilize the following questions to guide a global program analysis:

- ◆ Were the participants able to launch and sustain their businesses?
- ◆ Was there an increase in employment derived from this program?
- ◆ Did we improve the level of technology literacy among the participants?
- ◆ Was there an increase in the customer base for these companies?
- ◆ Was there an increase in revenues for these companies?
- ◆ Did the users of the IBN build their businesses at the same rate and with equal success compared to other users of WPEC not part of the IBN?

Data Analysis: Descriptive statistics and summarization of changes in knowledge and attitudes on computing will result from the surveys of participants. Descriptive statistics and qualitative analysis will describe the use of services and experts, and the business development of participants. Comparisons between IBN users and in-house programs at WPEC will help us gauge the effects of this program using WPEC's regular client

base as a control. We will try to control for other differences between the IBN and WPEC participants as much as possible using statistical and other methods.

Evaluators: The University of Pennsylvania's Center for Community Partnerships will be contracted to develop the evaluation instruments, conduct the evaluation, and analyze and present the results. The Center was founded in 1992 to improve the internal coordination and collaboration of community service programs at Penn, create new and effective partnerships between the University and the community, and to encourage new and creative initiatives linking Penn and the community. Dr. Daniel Romer, Senior Fellow at the Center, is a well respected scholar and researcher affiliated with both the Center and Penn's Annenberg School of Communications (see vitae in appendix). Dr. Romer will employ graduate students to assist in the evaluation.

Constraints: IBN is a long-term project that has the potential to alter the rate of entrepreneurial growth in West Philadelphia. Completing a thorough evaluation of the project in just three years is difficult. Evaluation of program participants within the three-year timeframe will give a view to the success, but true success can only be measured over the longer-term.

Budget: We have allocated \$60,000 of our project budget for the evaluation subcontract.

3. Significance

As the global economy becomes more reliant on technology, as the information economy demands a high skilled labor force and as e-commerce, internet usage, and global information exchange boom, the wealthiest communities in America endowed with the latest technology and most qualified workers are virtually exploding with wealth. In those communities it is relatively easy to conclude that information technology can be a critically important tool of economic development. Not so in economically disadvantaged communities like West Philadelphia.

Where poverty, dis-investment and physical deterioration dominate the landscape, it is easier to focus on basic needs like food, shelter, social services and education. Under such circumstances, it is difficult to envision how technology can be applied effectively to promote economic development. How does the 21st Century reach all of America's neighborhoods? Unless our society can answer this question, technological advances will serve only to further divide our Nation -- and West Philadelphia will never join the economic mainstream.

IBN can help reverse this trend by demonstrating how an economically disadvantaged community CAN harness Internet technology by building on current success and partnerships in community and economic development.

By recognizing the barriers to success this community faces, IBN proposes to enable access to and knowledge of powerful tools being utilized in the information economy.

IBN can enable West Philadelphia to become one of America's first communities to successfully utilize information technology to reverse decades of decline.

IBN has particular significance within the business incubation sector. WPEC already serves as a model to other inner-city business incubators. Current members of the National Business Incubation Association (NBIA) are not yet harnessing the full power of the internet. The NBIA leadership is looking at this project for possible replication among other group members. (See Letter of Support in Appendix.)

4. Project Feasibility

Technical Approach: The project has several key elements in its technical approach:

Desktop Computers, Software, and Networking: All project participants will be provided with desktop computers, business software (Microsoft Office Professional, Web browser), videoconferencing cameras, and printers for their business location (either their residence or the on-site business incubator). All participants will also receive a high-speed Internet connection (ADSL for residences, connection to WPEC LAN and Internet gateway via T-1 connection for on-site business incubator participants). Project staff will receive a small amount of similar equipment and networking to facilitate technical support.

Web-based Services: A variety of web-based services will be offered by a mixture of in-house, commercial and non-profit partners. These services will include access to a web-based information server, web-based conferencing to support collaboration and support, point to point and multi-point desktop videoconferencing between project participants and experts to facilitate mentoring and information exchange, e-mail lists with message archiving and retrieval, E-commerce services to integrate with business offerings, web-based training on technical and business issues, and shared database services to support marketing and E-commerce activities.

Mentoring and Advice: One of the most important components of the program is the human component – the network of experts, mentors, and assistants who will work with the entrepreneurs and future entrepreneurs to train them, guide them, and enhance their effectiveness. A wide variety of organizations, including the University of Pennsylvania, West Philadelphia Chamber of Commerce, Ben Franklin Technology Center, West Philadelphia Partnership, and Philadelphia Urban Enterprise Network will all be involved in this effort. In addition, many local business persons and professionals are involved as volunteers in various programs sponsored by WPEC or its partner organizations.

Interoperability: Careful steps are being taken to ensure that the systems and services deployed will be fully interoperable with the widest possible audience. Specific steps include: selection of TCP/IP as the only supported networking protocol; appropriate Internet standards for email (IMAP for client to server communications, SMTP for mail exchange); support for H.323-compliant video-conferencing if multi-point connection is

required; and all product interfaces will be through standard WWW browsers (Netscape 4+ or Internet Explorer 4+).

Technical Alternatives: Participants in this project will use industry-standard, business-quality desktop computers. Connections will be via ADSL. The West Philadelphia neighborhood should be ADSL-capable by July 1, 1999. ADSL connections will not be required until nearly nine months after that, providing ample time for the service to stabilize. West Philadelphia does not yet have Internet capability through its cable TV franchisee (Wade Cablevision, a subsidiary of Time-Warner). These services will likely come online over the next 12 to 18 months and could be substituted for ADSL services. Pricing is not yet available. Web services will be offered on a variety of platforms: the University of Pennsylvania will provide a Unix-based web-server to enable collaboration, support e-mail for project participants, and to disseminate information. Circuit Avenue Netpreneurs will provide E-commerce services. DCANet will provide T-1 connectivity for WPEC, and ADSL services through Bell Atlantic.

Scalability: The program's functionality does not depend on any particular desktop PC, or network connectivity option (other than reasonable bandwidth), so any commodity PC or high-speed connection will work. Web servers that will be used to provide network services are highly scalable and replicable. The number of program participants could be expanded, or geography extended, if desirable. While many aspects of program participation are "virtual," scaling the human component (support, mentors, business planning assistance) needs to be carefully planned to ensure quality.

System Maintenance: Bandwidth to the Internet will continue to get faster and cheaper over time. Use of standard protocols ensures compatibility with these developments and the ability to exploit additional capacity when available. Web servers can be in-sourced or out-sourced flexibly even if circumstances or relationships to partners change during the course of the project or subsequent to the cessation of the grant. All desktop computers will be purchased with three years of onsite maintenance. Web servers will be covered by hardware and software maintenance as well.

Applicant Qualifications: Founded in 1989, WPEC is a non-profit economic development organization assisting entrepreneurs in urban settings by creating an environment in which young businesses can grow to create jobs and wealth in West Philadelphia. Della Clark, WPEC's president and principal investigator on this grant, is a recognized business leader in Philadelphia who has won numerous awards for her work in advancing the cause of minority entrepreneurship. Ms. Clark has successfully demonstrated the ability to manage large scale federal grants having been awarded \$1.1M from the Department of Commerce, Economic Development Administration. (see bio in appendix). WPEC retains a staff of experienced business advisors to help develop its affiliated companies. For the purpose of this program, additional staff focused on business marketing will join the WPEC team. An additional technical support person will be hired to support the desktop computers being deployed to project participants in WPEC and in the community. A webmaster will also be hired to

coordinate the deployment of web-based services and maintain the information content developed by the project.

The University of Pennsylvania's experience in local and wide area networking is unmatched in the City of Philadelphia. Penn currently operates the largest modem pool in the City (1,000 modems) and provides Internet services for over 50,000 members of the campus community. The University is also an active participant in Internet 2. Dr. Noam H. Arzt, Senior Fellow in Information Systems and Computing, has been an active technology planner and manager for more than fifteen years. He was formerly the director of network services for the University and is now director of *UC Connect*, a program to bring high-speed Internet access to West Philadelphia. Dr. Arzt is also an active researcher at Penn (see vitae in appendix).

Other partner organizations are well positioned to support this effort. The University's Center for Community Partnership has strong expertise in evaluation and community relations. Circuit Avenue Netpreneurs and Rhizoid will be building upon their expertise in E-commerce and the Web to provide services to project participants. The Philadelphia Urban Enterprise Network and West Philadelphia Chamber of Commerce promote urban and economic development in the community.

Budget, Implementation Schedule and Timeline: The budget is explained in detail in the budget narrative and appendix. The project will require technical and programmatic staff capable of supporting and nurturing the participants. Hardware and software purchases have been described above. To be successful, the project will rely on contract services for many of its activities (including contract management, project evaluation, technical services, network services). Wherever possible, local West Philadelphia companies or affiliates have been selected. The appendix contains a detailed schedule and timeline for the full three years of the project. The first six months will be focused on equipment acquisition, product development (web based products), recruitment of mentors and advisors, full development of the evaluation plan, and the start of business recruitment. The next three months will focus on business selection. Deployment of services is expected to commence during the third quarter of the grant's activity and continue for the duration of the project. Program evaluation will take place at appropriate intervals. Project management activities will also take place throughout to ensure compliance with NTIA/TIIAP requirements.

Sustainability: The goal of the program is to make these entrepreneurs as self-sufficient as possible. A key part of the business planning that will be offered to them will be to plan for their funding of the ongoing costs of the services offered under the program once the grant funding ends.

5. Community Involvement

Partnerships: The project relies on strong partnerships from the community. Partnership agreements, memoranda of understanding and letters of support are included in the appendix. Project collaborators will meet quarterly to discuss project

developments and project status. In addition, an internal website will be developed to keep partners up-to-date about project status. An e-mail list, accessible to all partners, will facilitate information exchange. A list of key partners is included in the appendix.

Involvement of the Community: Many of the partner organizations have deep roots in West Philadelphia. They share economic development as a mission. Many conduct broad-based outreach in the community, and the project will rely on these pre-existing relationships, programs, and initiatives to ensure proper alignment with community needs. The quarterly Partners Roundtable will be a formal opportunity for both sharing of information and community planning, supplemented by many informal opportunities for information exchange and collaboration via email.

Support for End Users: This project is about empowering new businesses in a predominantly African-American community. The services that will be offered will be highly customized and sensitive to social, economic, and emotional requirements. WPEC and its partners are experienced in addressing the needs of this community. Our approach is “high-touch/high tech” – we will offer state-of-the-art technology and services with training, mentoring, and supportive services.

6. Reducing Disparities

As described above, the target end users survive on a fairly marginal income. Desktop computer ownership and access to the Internet are practically non-existent in this inner-city population. The goal of the project is to provide some of the same services and benefits to which larger and better-funded businesses have access. WPEC believes in promoting economic development one business at a time. Through this project, we hope to develop a cohort of businesses who rely on a modern infrastructure where the Internet is a cornerstone of their operations and external marketing and product/service delivery. We believe that prospective entrepreneurs, or existing businesses elsewhere in the Delaware Valley, will choose to locate their businesses in West Philadelphia.

7. Documentation and Dissemination

The project will use two primary means to document its findings and disseminate information about the project:

1. We will build an active and living website that describes the project and its evolution over its lifecycle. This public website is supplemented by a private website for project management purposes. Dr. Arzt will be in charge of this aspect of the project. He has been actively involved in pioneering this approach to project management, and has constructed informational web-sites for various government- and foundation-sponsored research projects.
2. We will actively submit abstracts to all appropriate conferences and journals to discuss aspects of the planning, execution, and evaluation of this project. Travel or conference attendance fees will be born by the presenter.